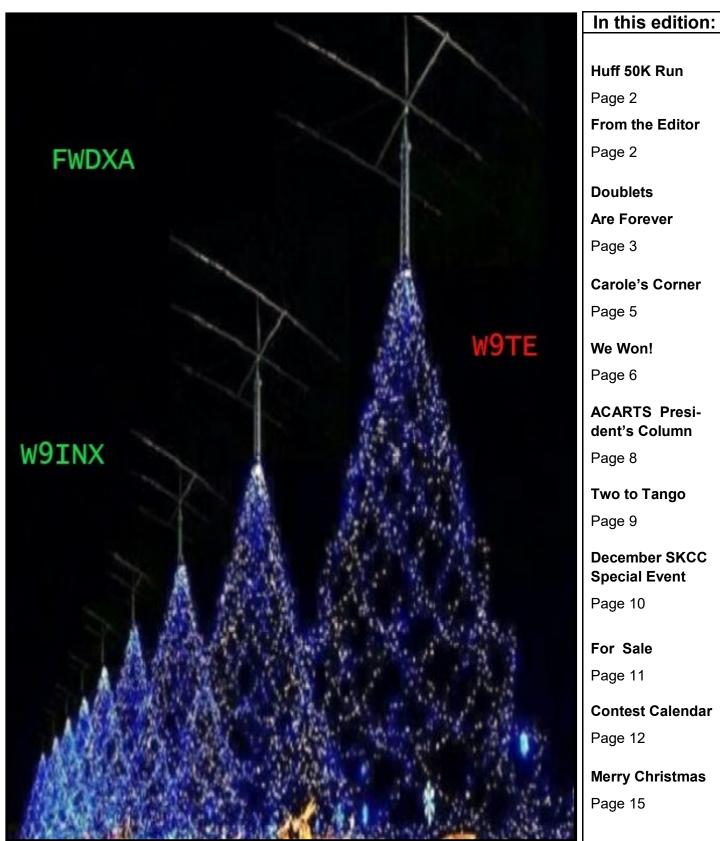


Volume 21
Issue 11





Huff 50K Trail Run

As announced on the weekly ARES Net, the annual Huff 50K Trail Run is scheduled to occur on Saturday, December 19, 2020.

Here is the info from the organizers (in italics):

2020 Race Date: Saturday, December 19, 2020.

It is still intended that the race will be live. However, the status of the county may change as we approach the race.

We have taken on constructing a robust safety plan. It will require different practices and a paring down of activities associated with it. But we know folks want to run and we are endeavoring to create a safe platform for runners, volunteers and support personnel to do so.

If circumstances change, registrants will be notified. We will have a virtual race, deferral of entry to 2021 and possibly a potential make-up date. These are all live options. What we do know is that if the race is live — participants will need to stay in their cars until 5 minutes before the start. To accommodate that, the race start will take place at the top of the hill (above the Sand Lake parking area). This will put participants in close proximity to the major parking lots above Sand Lake. ALSO, 50K participants will start at 8 AM. One Loop AND Relay participants will start at 9 AM or later. The start mat will be open for each event at least 15 minutes.

Relay teams will run together and add their times. This is a change from what we have jokingly called the only real rule for The HUFF. We have always required relay teams to run a real relay – with the next leg not begun until the prior leg's runner had crossed the mat at the chute.

Understand we are still working with health authorities on this plan and that details may change as circumstances change.

This is one week PRIOR to Christmas Day; since Christmas Day falls on a Saturday – we move it to the weekend before Christmas instead of its traditional time on the Saturday between Christmas and New Year's.

Note that entry to Chain O' Lakes State Park is

included in your registration; you will not have to obtain a parking pass or pay at the gate on race morning.

If you are interested in participating in this event, please reply by email to servo300 (at) aol.com with your desired location and shift(s) you would like to work.

Thanks,

Stay Safe and Well!

Jim Moehring, KB9WWM

From the Editor: End of Year One!

Over the weekend I made a brief (and socially distanced) trip to Michigan. Since the trip involved 8 hours on the road, I brought my mobile HF setup again that I mentioned in last month's column. A lot of fun!

As we end this tricky year, I wanted to take a moment to pass along a few thoughts. First, thank you to Joseph Lawrence, K9RFZ for his service as Fort Wayne Hamfest manager. I know that this is a huge undertaking. Second, thank you to each person who has contributed material to the HamNews. This makes my job as newsletter editor a real joy.

Is there anything new that you'd like to see included in (or excluded from) the HamNews for next year? If so, drop me a line!

All the best wishes for the holidays, Christmas, and the New Year!

Josh Long, W9HT

drjoshlong (at) gmail.com

P.S. As a reminder, please be sure to send any content to me that you would like to include in the January edition of the HamNews by no later than Wednesday, December 30th.

Tuning Up

By Jim, AC9EZ

"Doublets Are Forever"

Few antennas in amateur radio share the longevity of the doublet antenna (except perhaps the Marconi or Sterba curtain antennas). Doublets are easy to put up, simple to maintain, and one of received power, the same swr in an open-wire the most efficient methods of transferring power to and from an amateur radio. Since December of 2018, I have used doublets as one of my main hf antennas and have continuously been impressed by the performance possible from these "old school" antennas. Their utility to the modern -day ham lies in their simplicity of design and their yeoman function in a wide-range of ham activities.

Doublet Philosophy

An obvious question is the following: "What is a doublet antenna?" Simply put, a doublet is an antenna in a form similar to a dipole and fed with some type of open-wire line or parallel conductor line (such as 300 ohm TV twinlead, 450 ohm window line, or 600 Ohm ladder line). The length of the "antenna" portion of the system, what we would call the dipole, is unimportant and can be any length, either an exact half-wave on a particular band (as described by the ARRL Handbook) or some odd-length that doesn't seem to be harmonically related to any band. Both styles of construction are dependent on the use of open-wire line, since the goal of this antenna is to achieve the greatest frequency flexibility with the smallest possible amount of loss.



Image: 450 ohm ladder line

But how does the doublet reduce loss? Is it possible to achieve a 50 Ohm 1:1 swr match with one antenna on every ham band, without the use of special transformers or physical motors and gears? In the doublet's case, a 1:1 swr (standing wave ratio) matches mean nothing, because it is hardly ever achievable. Without going into a discussion on the effects of swr and the possible

causes of swr mismatches, suffice it to say that the higher the swr (in coax fed antennas), the higher the loss of transmitted and received power. Loss affects both sides of the transmit/receive equation. When open-wire line is used to feed an antenna, swr no longer is a major factor in loss of signal. Whereas a high swr could cause a coaxfed antenna to lose 50-80% of its transmitted and fed antenna may cause 1-5 % of power loss.



Image: A common antenna tuner

There is no free lunch, and like economics, an "invisible hand" balances out the doublet antenna's successes with its failures. Unlike a coaxcable fed dipole, the doublet cannot be just "plugged in" to the back of your hf/50 Mhz radio. Additionally, since your hf radio will not work unless it sees a nearly perfect 50 Ohm load, the doublet can only be used with an external antenna tuner capable of matching high imped**ances.** So, to use a doublet antenna, you either have to connect the doublet's feedline directly to the antenna port of your "balanced" antenna tuner, or you have to transition from the open-wire line to some sort of low loss coax via a balun (balanced-to-unbalanced). That antenna tuner and balun must be capable of handling whatever power level you plan on using, with more expense incurred with higher power outputs.



Image: An expensive antenna tuner

Doublet Tuning

As mentioned above, doublet antennas don't care about swr, since it is an inherently low-loss antenna. However, your antenna tuner does have its limits, and some doublet antenna lengths can be more "troublesome" to tune than others. If one builds a doublet antenna and finds the tuner unable to "load up" the antenna, then two techniques are called for.

#1) Add or subtract wire from the overall doublet's length.

#2) Add or subtract open-wire feed line lengths in the antenna's feed line.

Eventually, one will hit upon an optimum antenna/feed line length that allows the tuner to match the doublet on every desired band – a sort of antenna "nirvana". Theoretically, one could adjust the coaxial cable lengths if coax cable is used, but it is much easier to just cut and splice openwire line as compared to cutting and splicing coaxial cable.

Although not strictly part of the doublet's tuning, the subject of what ratio to use for the balun must be addressed. The major choices that most operators use are either 4:1 or 1:1 ratios. G3TXQ, the refiner of the Hexbeam antenna design advocated for a 1:1 ratio, as it did not introduce yet another impedance difference into the system. Yet, good success has been achieved with 4:1 ratios. Either ratio is worth a look, but one must ensure that the 4:1 balun is truly a 4:1 balun and not merely an impedance transformer. For a balun to work correctly, it must choke off common mode current (a prime cause of rf burns and rf in the shack phenomenon).

admittedly subjective experience, the doublet is a match for any dipole, and quieter on the higher bands than a resonant dipole due to its series of peaks and deep nulls at various elevation angles. Like any antenna used on bands higher than its closest fundamental frequency, the radiation pattern of the doublet suffers from what I would call the "Hedgehog effect", with signal radiation peaks and nulls rising and falling from takeoff/received angles of 0 to 90 degrees. In my own log, doublet antennas have been a mainstay of my station for several years, with DXCC's worked as far as New Zealand. During the Indiana Qso Party in May of this year, I held a run frequency on 40m for several hours using a 220 foot long doublet squashed into the property boundaries.

Is the doublet a perfect antenna? Far from it, depending on your definition of perfect. Will the doublet transmit and receive signals? Yes it will, and with much lower loss than many coaxial-dependent installations. It isn't a panacea for working the most rare entities or breaking through the biggest pileups, but it gets your signal on the air. A doublet in the rough is a gem of a radiator.

A very Merry Christmas to all who may read this column. May God's richest blessings of health, peace, success, and good radio contacts be upon you all (and your stations).

Jim, AC9EZ

Doublet Performance

How does the doublet antenna perform? Like the dipole, the doublet radiates strongest broadside to itself, and weakest "off the ends". Since it is a current-fed antenna (fed at a current maximum), the relative height of the center portion and immediate surroundings of the center of the antenna will play a determining factor in its effectiveness. From my own



Fort Wayne Radio Club P.O. Box15127, Fort Wayne, IN

Carole's Corner



I I hope everyone had a wonderful and healthy Thanksgiving. Al and I did. We were in Phoenix with some very special friends whom we have known for 52 years. For me I am happy that this year is almost over and pray that 2021 is better.

As for the Radio Club, we are ending it the way most of the year has gone with no meeting place and thus no December club meeting. And I had great meetings lined up for December, and January too. Maybe February will be better.

On a more positive note, I'm happy to report that the Fort Wayne Radio Club came in with the high score (737,223 points, spread across 23 logs) in the Indiana QSO Party competition. It was a record; the second place score

being only 360,546 points. Congratulations to all who participated.

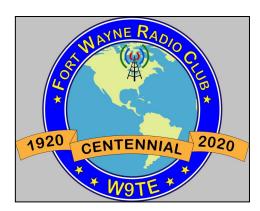
Don't forget to re-up your club membership for 2021. Re-upping your membership allows you to participate in the raffle of three items this year, (a La Crosse Technology wireless weather station, a Astron VS-50M 13.8vdc, 50 amp linear station power supply, and a Astron SS-25 13.8vdc 20 amp switching station power supply. Drawings for the winners of the three items will be determined on 15 December.

I welcome our new members and welcome back members who have had health issues.

So, Merry Christmas, Happy Hanukkah, or however your family celebrates. Be safe, healthy and enjoy. See you next year.

73's and 88's,

Carole, WB9RUS



FWRC Officers 2021

President

Carole Burke, WB9RUS (260) 637-1989 Wb9rus(at)comcast.net

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Charles Ward, KC9MUT (260) 749-4824 Kc9mut(at)yahoo.com

Directors

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Clarke Derbyshire, KG9FM (260) 485-6255 Cderbyshire(at) comcast.net

Bill Hopkins, K9WEH

Stuart Hall, KD9LFW

Newsletter Editor Josh Long, W9HT

We Won! We Won! We Won!

While it comes as no surprise, it is now official: The Fort Wayne Radio Club won the club competition in the 2020 Indiana QSO Party! Typically, the Lafayette DX Association wins the plaque offered to the highest scoring club. This year they had 11 member logs totaling 360,546 points. We came together submitting a record 28 club member logs with a record breaking 737,223 points! That is more than double what the Lafayette group did! What I find interesting is that the Fort Wayne DX Association submitted 4 member logs for 108,990 points. That's 32 log submissions from the Fort Wayne area! Two of the top three high power scores came from our club: N8KR with 192,355 points and W9GT with 184,440 points. AC9EZ was in the top 5 low power score and top Allen County low power score with 112,267. While those scores are noteworthy, each and every club member who submitted a score is responsible for the success of the high honors for our

CLUB COMPETITION	
Fort Wayne Radio Club (28 logs) KD9KMK KB9OZI KB9OS KD9ITZ K9BLI W9SAN K9EA WA9BBN K9LI KA9GKE AC9EZ KD9INP W9WN KR9U KD9GDY W9HT W9GT K9FMX N9HRA KU8T W9LW K9FW N8KR KJ9R N9RIS W9SA KD9HAV K3HZP	737223
Lafayette DX Association (11 logs) K9ELF K9WX N9FN KF9UP K9WX N9FN K9FN N9LJX N9LF KF9UP N9LJX K9SE WB9QIU N9LF K9FN N9KT W9TN	360546
NorthWest Indiana DX Club (5 logs) W9DZ W3ML AJ9C K9KJ N9RD	224907
Dillman's Amateur Radio Experimenters (2 logs) W9CC W9BU W9WO WA9FDO WB9CIF	121493
Kokomo Amateur Radio Club (4 logs) KC9NNH WN9O N9JIN K9GTJ	121306
Tri-State Amateur Radio Society (9 logs) WB9ONU N9QVQ AA9WJ N9OL WB9YIG KE9YK KC9UVG KK7XT N9JCA	108990
Fort Wayne DX Association (4 logs) KC8ZH K9LA AE9YL KK9EJ	108630
Clark County Amateur Radio Club (5 logs) K5QO N9DPR KA9Z N9BWT KB4CF KB9OIC K9ZF KC9TQN N9BWT NJ9U KB9VMW	68698
Eli Lilly Amateur Radio Club (3 logs) KK9V KJ9C NU9DE	67272
Mid-State Amateur Radio Club (4 logs) WA9VBG K9ICP K9THR W8ISH	47094
Patoka Valley A.R.C. (4 logs) K9RBH N9NAU KA9GDW N9MZF	44500
Indianapolis Radio Club (5 logs) WA9BVS KC9SKA KJ9B N9NIC K9RU	35032
Ohio Valley Amateur Radio Club (7 logs) KF4LXS KD9KEG W9KHP KD9OFX W9TPJ KD9OLB KC9CLO	16589
Whitley County Amateur Radio Club (1 log) N9QCL KA9QWC K9EJS	4300

club! I'm guessing the Lafayette group may have us in their "crosshairs" for next year BUT we <u>shall</u> remain on top with this challenge: let's increase the number of submitted logs from our club for next year – let's keep the momentum going for our club – time for ALL to get on the air for INQP 2021 to support the Fort Wayne Radio Club. Thanks again for these committed club members:

KD9KMK + KB9OZI + KB9OS + KD9ITZ + K9BLI + W9SAN + K9EA + WA9BBN + K9LI + KA9GKE + AC9EZ + KD9INP + W9WN + KR9U + KD9GDY + W9HT + W9GT + K9FMX + N9HRA + KU8T + W9LW + K9FW + KJ9R + N8KR + N9RIS + W9SA + KD9HAV + K3HZP

If you're not on the list, make sure you join the gang for next year!

73 de Ken - N8KR

FORT WAYNE RADIO CLUB MEETING MINUTES

17 November 2020

The November meeting of the Ft. Wayne Radio Club was held at the Allen County Public Library (downtown) on 17 November, 2020. We made use of meeting rooms A & B which provide room for up to 126 people in a Corona virus compliant environment. We had also reserved the venue for the December meeting subject to an upcoming library's Board of Directors decision regarding tightening restrictions because of the resurgence of the Corona virus

Club President Carole Burke, WB9RUS welcomed the attendees (about 12) where-in all identified themselves by their name and call-sign. And then we executed the pledge of allegiance ceremony according to our usual practices.

Carole asked each attendee to describe briefly what motivated them to get into our ham radio hobby. The ensuing descriptions were an interesting addition to the meeting.

There was no Treasurer's report.

All of the club repeaters were noted to be operating normally.

Al Burke reported on the club 2021 dues promotion just started. Since there is no Hamfest this year our practice of promoting the renewal of club membership during the Hamfest weekend was not possible. Instead the club is mailing membership renewal forms to the 130 members of record for CY 2020 along with a stamped envelope addressed to the club P.O. Box to make renewal a simple task. As an inducement to re-up, three items consisting of a:

- 1. La Crosse Technology Wireless Weather Station with sensors for wind speed, wind direction, temperature and humidity.
- 2. Astron VS-50M, 50 amp, 13.8 vdc linear power supply with adjustable voltage and current limit.
- 3. Astron SS-25 switching power supply, 13.8 vdc up to 20 amps.,

are being raffled off. Each person who joins the club or renews their membership during the promotion receives one "ticket" that can be submitted for one of the three items. In addition, one may purchase additional "tickets" for any or all of the three items for one dollar per ticket. The "tickets" will be dropped into three buckets corresponding to the three items and the three winning "tickets" will be drawn during the December club meeting on December 15th. The promotion via return hard copy mail will close as of December 12th but renewal forms may be physically delivered to any club officer or Board member up to December 15th, just before the raffle drawing. Downloadable copies of the renewal form can be found in the article "Mail-in raffle underway to promote FWRC membership renewal" posted on the club internet page (fwrc.info) for those folks who were not in CY 2020 membership database.

Following the business meeting Zach Bernach, Information Officer for the Biomedical Services section of the American Red Cross in Indiana, provided a fascinating description of the activities and services provided by the Red Cross. One of its principle missions relates to maintaining the blood supply for local

hospitals. Its blood related products consist principally of red blood cells, blood plasma and blood platelets (used in Chemotherapy). Managing the blood donation programs needed to support the unending requirement for blood products is a prodigious task, especially now that the Coronavirus has complicated things. Zach mentioned that only 3 percent of the population participates as blood donors, and that only 38 percent are medically able to donate. So keeping ahead of the demand curve is a challenge. He said the Red Cross is always looking for organizations willing to sponsor a blood drive and that the FWRC might want to consider taking on such a task.

Carole commented that the club would take the concept of sponsoring a drive under consideration.

Carole noted that the December meeting is planned to occur at the library on December 15th, starting at 7:00 pm subject to what direction the library Board of Directors and the state of Indiana take in regards tightening things up because of the Coronavirus resurgence. Announcements will be made via the club newsletter and a club-wide e-mail.

The meeting adjourned at 7:55 pm.

Respectfully submitted,

Al Burke, WB9SSE

Secretary, Fort Wayne Radio Club

State of the Arts

Allen County Amateur Radio Technical Society

P.O. Box 10342, Fort Wayne, IN



ACARTS
President's
Message
for
December

With the COVID-19 cases showing a new

peak and more restrictions and recommendations being put into place, it would be impractical and not safe for ACARTS to hold a Christmas Dinner this year. Therefore, December 2020, will be another month with no ACARTS meetings of functions.

ACARTS did hold the annual election of officers, managers, and directors-at-large for 2021 last month. The nominations and election were done entirely by email and absentee ballots. Many thanks to the many ACARTS members that voted via e-mail to approve the slate of candidates as presented by acclamation. Thanks to last year's officers and board members that agreed to run for another year. Fred Gengnagel, KC9EZP, moved from being a director-at-large to Fundraising Manager, or Hamfest Chairman. Jim Sampiere, KD9NPL, was nominated for and elected to the position of Station Manager. There is an open position as a director-at-large that can be filled by approval by the board, should someone come forward after ACARTS starts holding meetings again. Let us hope that 2021 will not be a lost year as

was 2020, and ACARTS will be holding meetings and functions before too much longer.

As you are aware, It is time to renew your ACARTS membership for 2021. Normally, about half of the members would renew their ACARTS membership at the Hamfest. With the 2020 Hamfest being cancelled and no ACARTS meetings being held for the foreseeable future. all ACARTS renewals and new members must be done by mail. A reminder email, along with a membership application form, was e-mailed to all members a couple of weeks ago. Thanks to all of you that have responded and sent in your renewal. There will be more notices sent in the future but let us show our support for ACARTS and get the renewals in now.

In the meantime, remember that we are hams. The HF bands are starting to have more and more openings and activity is picking up. Make use of your radios to stay busy and keep in contact with your friends via the repeaters.

73,

Dave Lindquist, W9LKH

W9INX

ALLEN COUNTY AMATEUR RADIO TECHNICAL SOCIETY

ACARTS Officers 2021

President

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Vice President

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Chris McCollough W9TSB 260-312-2750 kd9lrw(at)gmail.com

Treasurer

Howard Pletcher N9ADS 260-747-5252 n9ads(at)arrl.net

Station Manager
Jim Sampiere, KD9NPL

Fundraising Manager

Fred Gnegnagel KC9EZP 260-704-7801 kc9ezp(at)gmail.com

Directors at Large

Bob Erb N9PWM 260-466-7772 roberterb(at)hotmail.com

Steve Shannon K9SKS 260-704-5353 k9sks(at)aol.com

(1 open position)

W9INX Trustee

Dave Lindquist W9LKH 260-485-6135 w9lkh(at)comcast.net



Sometimes It Takes Two to Tango

Carl Luetzelschwab, K9LA

Because of my traffic handling efforts in my early ham radio years, I'm now active on QIN (the Indiana section CW traffic net) and on 9RN (the Ninth Region CW traffic net). I also enjoy DXing on 80m, as I still need several zones on 80m to finish my 5BWAZ (5 Band Worked All Zones) award.

Realizing that propagation for the traffic nets is NVIS (Near Vertical Incident Skywave) propagation, the antenna on QIN and 9RN needs to concentrate its energy at higher elevation angles. But this antenna would not be the best for DXing, which needs an antenna that concentrates most of its energy at lower elevation angles.

My solution to this problem was to go with two antennas. I have an 80 meter inverted-vee with its apex at about 35 feet for the traffic nets, and a full-size tree-supported quarter-wave wire vertical with four elevated radials for DXing. On the traffic nets, the 80 meter vertical is down about 2 S-units from the inverted-vee. Thus the vertical appears to be doing its job of putting most of its energy at the lower elevation angles.

As you might guess, this solution of having two antennas is not for those on a smaller lot. Is there another solution? Yes, there is, and it's by Ray LaRue, W4BYG, near Chattanooga, TN. His 75 meter interests are similar to mine – working both distant stations (North America and DX) and close-in stations (out to Memphis at about 350 miles to the west). What he decided to do is use a 43-foot vertical, and either have it straight up in the normal position for distant stations or slanted at a 45 degree angle for NVIS (close-in) stations.

When the vertical is straight-up, there's a null overhead in the pattern – which is not good for NVIS (close-in) propagation. Slanting the vertical at 45 degrees fills in the overhead pattern for decent NVIS coverage. I said "decent" because it is not as good as two separate antennas. Additionally, W4BYG devised a motorized mechanical tilting mechanism that he controls from the shack. See the photo of his antenna system with the vertical in the slanted po-

sition for close-in stations.

W4BYG's effort is a good example of ham ingenuity to resolve an issue. It might not be the perfect solution, but it appears to be good enough for his interests.

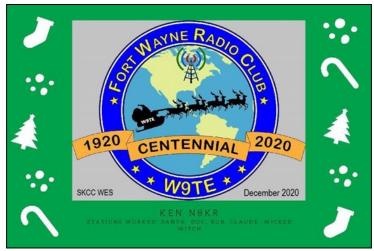


December WES - Santa, Reindeer, Scrooge Special Certificate

Santa and his reindeer are all ready and waiting for that big December event: the SKCC WES! This year, Santa and the reindeer are all coming from the Fort Wayne, Indiana area and all are members of the Fort Wayne Radio Club which is celebrating its 100th anniversary this year! SKCC is very popular with the Fort Wayne Radio Club as 40+ of its members are SKCCers! So, to commemorate this special anniversary, the Fort Wayne Radio Club is offering a special certificate for those who work Santa: **W9TE 20000S** with special endorsements for working his entourage:

Dasher	WA9BBN	17763S	
Dancer	WB9EAO	12021S	
Prancer	AC9EZ	10658T	
Vixen	W9HT	7474S	SK 4 CC
Comet	K9FW	20492S	SK/CC
Cupid	KD9GDY	18156S	Straight Kay Contumy Club
Donder	W9SA	19001T	Straight Key Century Club
Blitzen	KU8T	2442S	
Olive	K9LI	19153S	
Rudolph	W9GT	21069S	
Santa	W9TE	20000T	(FWRC Club Call operated by a many ops)
Scrooge	N8KR	7559S (FWRC Member <i>wintering</i> in Florida)

If you use the SKCC logger, update your membership database as you begin WES as the names of Santa and his crew have been temporarily changed to reflect their bonus names (ie. If you enter WA9BBN in the logger, You will not see, "ED" as the op but, "Dasher." This will help identify the bonus stations. Bonus points: earn 5 points for each time you work a reindeer, Scrooge and Santa. (Yes, you can work them on multiple bands for extra bonus points) Requests for a certificate for working Santa with Reindeer endorsements can be emailed to w9ht (at) arrl.net. Include your name, call and stations worked. A PDF of your certificate will be emailed back to you.





For sale and wanted listings in this section are provided to members of the Fort Wayne Radio Club, the Allen County Amateur Radio Technical Society, the Fort Wayne DX Association, and to other local hams free of charge! Listings can be renewed upon request to the editor (see pg. 2 for contact information).

- DX Engineering 43 foot vertical for 160 10 meters. It includes:
 - (1) 43 foot DX Engineering Thunderbolt antenna, DXE-MBVA-1UP
 - (2) DX Engineering SAF-T-TILT tilt-over mechanism to allow installation by one person
 - (3) DX Engineering 4:1 unun with a 2kW/5kW peak power rating at 5:1 VSWR
 - (4) Hy-gain-6104 range extender for 160 and 80 meters
 - (5) ground mounting pipe

This antenna does require a radial system.

All are in good condition for \$335.





For this antenna, please contact Bill Rodgers K3HZP at HZP Electronics (at) juno.com

I am looking to either purchase or pick up an older, non-working, hf amplifier (a "tech" special). An older Ameritron or Heathkit amp is preferred, but an old sweep-tube amp is also welcome, either as a "throwaway" item or at minimal price. If anyone has a possible project amp, please email me at dfile13 (at) hotmail.com, or call me at 260-485-7770. You may leave a phone message. Thanks and 73,

Jim AC9EZ

- Max-Gain Systems MK-8 HD telescoping antenna mast with heavy duty guy ring kit. \$120
- W9IIX gin pole. Needs new rope. \$75

For any of these items, please contact Terry K9FMX at tjbowman (at) frontier.com or at 260-705-7128.

- Yaesu ATAS-100 Active Tuning Antenna System. Good cosmetic condition, unknown operating condition. \$100 or best offer.
- Radio Shack HTX-202 2m handheld radio. \$50 or a lower price for a new ham who needs an affordable radio.

Contact Josh W9HT for more information. See page 2 for email address.

Your item could be listed here next month! Just send the editor an email with your listings before December 30th! See page 2 for contact information.

Selected Contest Cal	endar for December 2020
SKCC Sprint Europe	2000Z-2200Z, Dec 3
QRP Fox Hunt	0200Z-0330Z, Dec 4
NCCC Sprint	0230Z-0300Z, Dec 4
ARRL 160-Meter Contest	2200Z, Dec 4 to 1600Z, Dec 6
PRO CW Contest	1200Z, Dec 5 to 1159Z, Dec 6
RTTYOPS Weekend Sprint	1600Z-1959Z, Dec 5
FT Roundup	1800Z, Dec 5 to 2359Z, Dec 6
EPC Ukraine DX Contest	2000Z, Dec 5 to 1959Z, Dec 6
ARRL 10-Meter Contest	0000Z, Dec 12 to 2400Z, Dec 13
PODXS 070 Club Triple Play Low Band Sprint	0000Z, Dec 12 to 2359Z, Dec 14
TRC Digi Contest	0600Z, Dec 12 to 1800Z, Dec 13
SKCC Weekend Sprintathon	1200Z, Dec 12 to 2400Z, Dec 13
RTTYOPS Weekend Sprint	1600Z-1959Z, Dec 12
International Naval Contest	1600Z, Dec 12 to 1559Z, Dec 13
QRP ARCI Holiday Spirits Homebrew Sprint	2000Z-2300Z, Dec 13
Russian 160-Meter Contest	2000Z-2400Z, Dec 18
RAC Winter Contest	0000Z-2359Z, Dec 19
OK DX RTTY Contest	0000Z-2400Z, Dec 19
Padang DX Contest	1200Z, Dec 19 to 1159Z, Dec 20
Croatian CW Contest	1400Z, Dec 19 to 1400Z, Dec 20
RTTYOPS Weekend Sprint	1600Z-1959Z, Dec 19
ARRL Rookie Roundup, CW	1800Z-2359Z, Dec 20
SKCC Sprint	0000Z-0200Z, Dec 23
DARC Christmas Contest	0830Z-1059Z, Dec 26
Stew Perry Topband Challenge	1500Z, Dec 26 to 1500Z, Dec 27
CWops Mini-CWT Test	1300Z-1400Z, Dec 30
CWops Mini-CWT Test	1900Z-2000Z, Dec 30
CWops Mini-CWT Test	0300Z-0400Z, Dec 31
Bogor Old and New Contest	0900Z-2359Z, Dec 31
This information comes from the WA7RNM Contest Cale	

This information comes from the WA7BNM Contest Calendar at contestcalendar.com and is gratefully acknowledged. It is deemed accurate as of the time of publication.



1600Z 12 23592 18 25 HOLIDAYS Dec HAPPY PERIODIC TABLE OF MAJOR AMATEUR RADIO CONTESTS ARRL RAC ARRL 8 3 0300Z 2200Z 22 18 03002 00002 14 2359Z VHE/UHF Digital COWW <u></u>8 ARRL ARRL WAE RTTY SSB S 3 6 2159Z 2100Z 10 13 08002 00002 17 20 14592 21002 24 27 31 Germany Oceania Worked California COWW os O Party SSB SSB 080 S So ₹ 19 16 varies 15002 4 2 23592 16002 12 9 2359Z 0800Z 26 23 2400Z 30000 WA/NJ/NH Sep CWOps COWW Multimode Parties off-the-air Open WAE SSB S 8 **4** 0600Z 0000Z 22 18 0600Z 1600Z 29 25 12002 0000Z 15 11 23592 0000Z NAQP Aug NAQP WAE SSB ***** So S Digi 4 7 1400Z 1800Z 18 21 2100Z 1800Z 11 14 12002 0000Z 25 28 1200Z 1200Z Memorial RSGB Marconi IARU IOTA 1 州 生 生 6 3 1200Z 1400Z 20 17 2400Z 1800Z 14 10 0300Z 1200Z 27 24 2100Z 1200Z SEANET Contest Jun ARRL Asian ARRL June Field Day 出 ે ડે 2 5 varies 1200Z 9 12 11592 1800Z 23 26 1700Z 1800Z 16 19 12002 0000Z 30 2400Z **New England** QSO Parties 7QP/IN/DE Hamvention May King of University Spain Contest Dayton CO-M WPX ă S 25 20 21592 11002 11 8 1300Z 1200Z 18 15 2359Z 1200Z 1500Z varies Major Contest of weekend Apr COMM Florida Polish QSO Party X S ă ă 3 — End Day (UTC) 23592 — End Time (UTC) 7 3 24002 15002 14 10 0400Z 0700Z 21 17 1200Z 0900Z 28 24 24 24 24 24 1600Z Russian Mar Sprint ARRL RTTY SSB SSB ¥ ă ă 7 6 14 14 24002 0000Z 21 20 2400Z 1200Z Contest 28 27 Feb ARRL Sprint WPX SSB 8 S 160 Start Time (UTC) -Start Day (UTC) -10 13 06002 00002 17 20 0600Z 0000Z 3 7 24002 00002 18 26 0359Z 2200Z 31 Roundup January NAOP Jan ARRL NAOP ARRL YH. SSB g 160 S 16 19002 23002

			Area l	Nets	
Daily			Tuesday		
8:00 AM	3.535	Daily (QIN) Indiana Section CW net	7:30 PM	147.150+	21 Repeater Group Net (97.4 PL)
8:30 AM	3.940	Daily Indiana Traf- fic Net	8:00 PM	50.580 USB	FWRC 6-Meter SSB Net
6:00 PM	3.940	Daily Indiana Traf- fic Net	9:00 PM	146.940-	Allen Co. ARES Training Net (141.3 PL)
6:30 PM	146.880-	IMO (alternate is 146.760)	Wednesday		
7:00 PM	147.015+	Tri State Two Me- ter Net	7:00 PM	146.760-	FWRC YL Net
8:00 PM	3.535	Daily (QIN) Indiana Section CW net	8:00 PM	145.270-	Whitley Co. ARES (141.3 PL)
Week- days			8:00 PM	50.580 FM	FWRC 6-Meter FM Net
9:00 AM	3.820	Little Red Barn Net	9:00 PM	146.940-	Help and Swap Net (141.3 PL)
Sunday			Thursday		
8:00 PM	444.550+	Whitley Co. ARC Sunday Night Net (141.3 PL)	8:00 PM	D-STAR	Indiana D-STAR net (Note 3)
8:30 PM	1.965 & 146.910-	"No-Name" Net also on EchoLink Node number 519521	8:00 PM	50.580	AM 6-Meter AM Net
9:00 PM	145.53 simplex	Northeast Indiana Packet Net 1200 baud (Note 2)	8:30 PM	145.510 simplex	Allen County ARES Digital Operations Team Training Net (Note 4)
Monday			Saturday		
8:00 PM	224.780-	Fort Wayne 224 Net	8:00 PM	146.685-	Huntington ARES(141.3 PL)

3. Reflector REF024B.

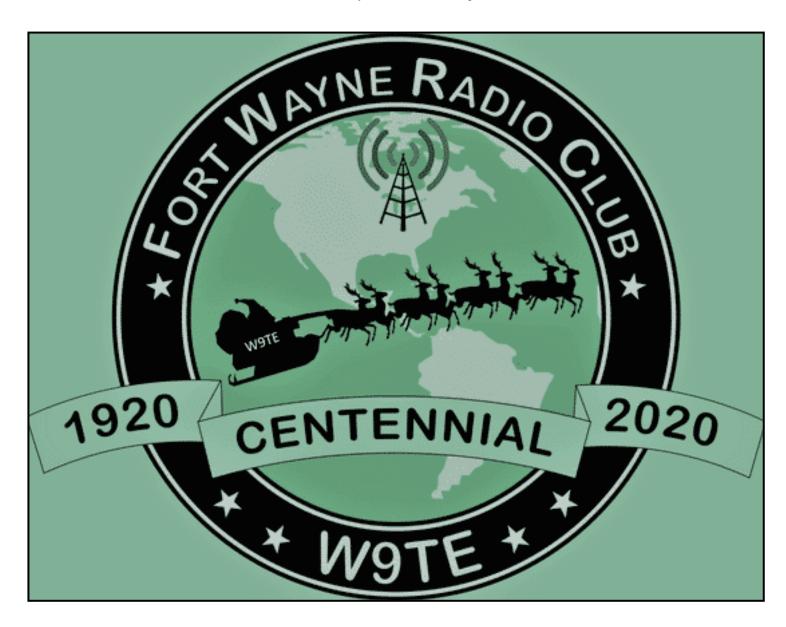
			Fort Wayı	ne repeaters	5		
Frequency	Offset	Tone	Callsign	Frequency	Offset	Tone	Callsign
145.330	-0.6 MHz		W9FEZ	443.100	+5 MHz	141.3	K9MMQ
146.880	-0.6 MHz		W9INX	443.275	+5 MHz	141.3	K9MMQ
147.255	+0.6 MHz		W9INX	442.6375	+5 MHz		N9MTF
146.760	-0.6 MHz		W9TE	444.800	+5 MHz		W9FEZ
146.910	-0.6 MHz		W9TE	443.800	+5 MHz		W9INX
146.940	-0.6 MHz	141.3	W9TE	442.99375	+5 MHz		W9TE
224.780	-1.6 MHz		W9FEZ	444.8750	+5 MHz	141.3	W9TE
				53.3300	-1 MHz		W9FEZ

^{1.} All times local time. Any changes or corrections should be submitted to the newsletter editor at drjoshlong (at) gmail.com.

2. NEIPN is direct accessible via any BPQ Chat Node (or through Node hopping etc.) via other packet frequencies in this area and other areas through other nodes (it is locally direct accessible on 145.53 in NC & NE Indiana/NW Ohio and SE Michigan using KA9LCF-11, KC9VYU-11, N9LCF-11,N9PXO-11, K9BIF-11) Most BPQ Nodes use an SSID of -11.

^{4.} Net starts using BPSK-31 and switches to BPSK-250 after roll call to pass traffic etc. NBEMS suite of software (FLDIGI, FLMSG, and FLAMP) is preferred.

5. Indiana HF Traffic Nets Web Site: http://www.inarrl.org/index.php/public-service/indiana-nts



Merry Christmas to all—and to all, a good night!

FWRC Membership Application
Name:
License Class:
Street address: City:
State: ZIP: . Phone #:()
Street address:
(ARRL membership helps the club maintain ARRL affiliation)
May we list your name, call & email address in our membership roster & on our club web site?
Fort Wayne Radio Club dues:
Regular membership \$20.00 / year
Family membership ¹ \$30.00 / year
Family membership ¹ \$30.00 / year Student membership ² \$5.00 / year Associate membership ³ \$20.00 / year
Associate membership ³ \$20.00 / year
(Memberships for July-December are ½ the stated amounts)
Please attach a check to this form (paying by check is strongly encouraged) made out to:
Fort Wayne Radio Club (check number) and bring to a club meeting or mail to:
Fort Wayne Radio Club
P.O. Box 15127
Fort Wayne, IN 46885-5127 Please list all names and calls on an attached sheet.
K-12 or full time student.
Unlicensed member.
Officerised member.
ACARTO Manchambin Application
ACARTS Membership Application
Name:Call Sign:
Name:Call Sign:
Name:Call Sign:
Name:Call Sign:
Name:
Name: Call Sign: License Class: City: Street address: ZIP: State: Phone #:() Email address: ARRL Member? (ARRL membership helps the club maintain ARRL affiliation)
Name:
Name: Call Sign: License Class: Street address: City: State: ZIP: Phone #:() Email address: ARRL Member? (ARRL membership helps the club maintain ARRL affiliation) May we list your name, call & email address in our membership roster & on our club web site?
Name: Call Sign: License Class: Street address: City: State: ZIP: Phone #:() Email address: ARRL Member? (ARRL membership helps the club maintain ARRL affiliation) May we list your name, call & email address in our membership roster & on our club web site? ACARTS dues:
Name: Call Sign: License Class: Street address: City: State: ZIP: Phone #:() Email address: ARRL Member? (ARRL membership helps the club maintain ARRL affiliation) May we list your name, call & email address in our membership roster & on our club web site? ACARTS dues: Regular membership \$12.00 / year
Name: Call Sign: License Class: Street address: City: State: ZIP: Phone #:() Email address: ARRL Member? (ARRL membership helps the club maintain ARRL affiliation) May we list your name, call & email address in our membership roster & on our club web site? ACARTS dues: Regular membership
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Name:
Name:
Name: Call Sign: License Class: Street address: City: State: ZIP: Phone #:() Email address: ARRL Member? (ARRL membership helps the club maintain ARRL affiliation) May we list your name, call & email address in our membership roster & on our club web site? ACARTS dues: Regular membership
Name:
Call Sign:
Name: